

Controller's Quarterly

California Economic Challenges

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Message From State Controller

Kathleen Connell

I am pleased to present our latest issue of *Controller's Quarterly*. This edition examines the fiscal impact of California's changing demographics. Over the next two decades, the age, education, income, and employment attributes of California's population will shift significantly. Tax revenues will be affected, as will the demand for certain public services, such as education. In the following pages, we explore the nature of these demographic shifts and the challenges they present to policy makers.

The aging of the baby boom generation will have a major impact. Currently, California is in a Golden Age with respect to tax revenues as the baby boomers pass through their peak earning years. Within the next decade, however, this generation will begin to retire, deriving income primarily from non-taxed or low-tax sources such as savings, investments, pensions, and Social Security. This will slow the growth of personal income tax revenues. At the same time, the demands on our education system will increase as the next wave of school-age children arrives.

In the overview article on state and regional demographics, our guest author reports on California's changing ethnic profile. Projections indicate that by 2000, no race or ethnic group will constitute a majority of California's population. The article summarizes demographic trends in each region of the state. Population forecasts from the three largest regions are also covered.

Age structure, not ethnicity, will be the major factor affecting the demand for various public and private services in California, reports our guest author on demography's impact on services. The article highlights two key policy issues facing California as we prepare for the surge of young adults during the next decade: the underfunding of our future education needs and the underparticipation of Californians in higher education.

As with every issue of the *Quarterly*, we also have included the latest information on California's economic health. I am joined by my Council of Economic Advisors in my optimism that the positive trends of the past year will continue in 1998. California's employment and personal income are projected to continue growing at healthy rates. Home sales are up, as are residential and nonresidential construction, providing further evidence of California's reinvigorated economy. Indeed, the economic outlook for 1998 is very encouraging.

KATHLEEN CONNELL

Controller State of California

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California Economy

Controller's Outlook

The National Outlook

Inflation was a no show in 1997, despite strong growth in the Gross Domestic Product and tight labor markets throughout the year. The Asian "flu" during the last half of 1997 makes it unlikely that inflation will reappear in 1998. Job growth was exceptionally strong in 1997. Average hourly earnings were also up — 3.7% over the prior year — giving workers a much-needed income boost.

Strong employment growth earlier in the year aroused some fears of an interest rate hike. The turbulence in Southeast Asian markets has largely erased that concern. Financial problems in that part of the world, combined with deep devaluations of currencies, will make U.S. exports less competitive both in Asia and in other parts of the world. It also is expected that a surge of imports from Asia will dampen prices in the U.S. That will be good for American consumers but may adversely affect corporate profits.

The California Outlook

California has been generating new jobs at a phenomenal rate. In 1997, it is estimated that the state's economy added more than 400,000 jobs, a 3.1% gain. This was the highest rate of job growth since 1988.

A pronounced drop in exports to Asia will moderate California's surge in employment. Japan, Korea, Singapore, Malaysia, Thailand, and the Philippines accounted for 39% of the state's exports in 1996; exports to those countries fell nearly 12% in the first half of 1997. Fortunately, these losses were offset by a 17% gain in exports to China, Hong Kong, and Australia, a 13% increase in exports to Mexico and Canada, and a 7% increase in exports to Europe. While it is hoped that Canada, Mexico, and Europe will continue to partially offset losses in California exports to Asia, it is unlikely that this would completely compensate for the downturn.

In light of these conditions, the Controller's Council of Economic Advisors is forecasting a 2.6% growth rate in California employment this year, down from last year's exceptionally strong growth. Personal income is also expected to rise more slowly in 1998 — 5.7% compared to 6.5% last year. Unemployment, which had declined to as low as 5.8% in November of last year, is projected to average 5.9% in 1998.

Mortgage interest rates have dropped substantially in recent

Figure 1

weeks. As of mid-January, 30year fixed rates were near their lowest point of this decade. This should reinforce an already invigorated housing industry in California. The Controller's Council estimates that residential construction will total 120,000 units in 1998.

Along with rising employment, one of the factors that caused residential building permits to exceed 100,000 for the first time since 1991 is migration. In early 1997, California saw a dramatic upsurge in net migration. This was the result of fewer residents leaving the state and more migration into the state. In 1997, it is estimated that net migration to California totaled 75,000, a dramatic turnaround from the loss of 84,000 people in 1994.

Employment

The highest rate of employ-

"California has been generating new jobs at a phenomenal rate. In 1997, it is estimated that the state's economy added more than 400,000 jobs, a 3.1% gain. This was the highest rate of job growth since 1988."

ment growth over the past year occurred in construction: its annual rate of increase from

1998 Forecast by Controller's Council of Economic Advisors

Council Member	Employment Growth (Annual %)	Unemployment (Annual %)	Personal Income Growth (Annual %)	Res. Building Permits (Thou)
LA Economic Devt. Corp. (J. Kyser)	2.6%	5.7%	6.6%	127
Calif. Assn. of Realtors (G.U. Krueger)	2.8%	6.0%	6.1%	130
UCLA Anderson Forecast (L. Kimbell)	2.9%	5.8%	6.0%	129
UC Berkeley, Center for Real Estate &				
Urban Economics (C. Kroll)	2.0%	6.0%	6.0%	110
Bank of America (J.O. Wilson)	2.6%	5.9%	5.7%	115
Pacific Gas & Electric (T. Munroe)	2.5%	6.2%	5.6%	106
ARCO (A. Finizza)	3.0%	5.9%	4.0%	125
Mean	2.6%	5.9%	5.7%	120
Median	2.6%	5.9%	6.0%	125
State Controller	2.7%	5.9%	5.7%	118
1997 Actual*	3.1%	6.4%	6.5%	110

^{* &}quot;Actual" figures may vary from prior published figures to reflect new data that has become available Source: State Controller's Office: Council of Economic Advisors

"In the past two months, employment in Los Angeles has been reinvigorated...
The entertainment industry (including motion pictures), the fashion industry, and education are leading the recovery."

November 1996 to November 1997 was 8.1%. The next strongest growth took place in services, where jobs increased 3.8% in the last year. Durable manufacturing also has shown strong growth, up 2.7% over the previous year. Employment

Figure 2

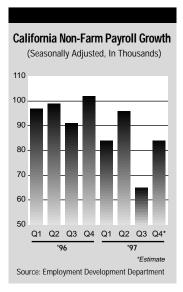
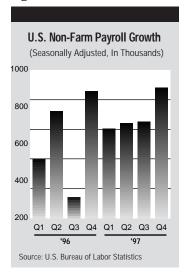


Figure 3



in the FIRE sector (Finance, Insurance, and Real Estate) continued to show weakness, as did jobs in retail trade. Figures 2 and 3 compare non-farm payroll growth in California and the U.S.

In the past two months, employment in Los Angeles has been reinvigorated. The area has been slow to recover from the recession of the early 1990s, but it now appears to be on track to join the economic rebound of the rest of the state. The entertainment industry (including motion pictures), the fashion industry, and education are leading the recovery.

Real Estate

Real estate prices surged in 1997. The median home price in the fourth quarter of 1997 was 12% higher than in the same period of 1996. Sales of homes were up 18.1% in the fourth quarter. While the Bay Area again led the state in price gains, Southern California also is experiencing substantial increases. In November, Los Angeles County prices were 5.7% higher than the year before; its sales activity was up 6.3%.

The California Association of Realtors reports that repeat home buyers returned to the market in 1997. Repeat home buyers constituted almost 60% of home buyers in 1997, compared to 57% in 1996 and 49% in 1995. These buyers bolster sales in the upper price ranges. Thus, an increasing number of repeat buyers tends to raise the average price of homes sold.

Residential Construction

Residential construction finished the year with a flurry of activity. Permits totaled 110,000 units in 1997, up 17% over 1996. It was the first year since 1991 that permits topped 100,000 units. Perhaps the best news was that Southern California led the state in residential construction, providing a much-needed economic stimulus to the region. This is a good indication that the region is again growing. Continuing declines in residential vacancy rates should keep this trend in place over the next year. Vacancy rates in Los Angeles County are now at about 7%, compared to a rate of 9% a year

Nonresidential construction also continued to grow at healthy rates in 1997. The Bay Area saw a 14% increase over 1996; Southern California experienced an 11.2% increase. Statewide, the rise was 14.3%, with the largest gains in the smaller metropolitan regions.

Personal Income

Growth in personal income in 1998 is expected to be less than last year — 5.7% compared to 6.5% in 1997. This is primarily due to slower employment growth. Turbulence in the stock market may also be a factor. Inasmuch as 20% of the personal income of California's higher-income taxpayers derives from capital gains, a significant drop in the stock market could adversely impact personal income growth.



California's population is among the most diverse of any in the world. No other developed region the size of California has sustained such rapid and tremendous growth over the past several decades. As recently as 1950, California was home to 10 million people. Today, the state's population has reached approximately 32 million residents; one out of every eight U.S. residents is a Californian. By 2020, it is estimated almost 50 million people will reside in California.

Besides the overall growth, there are significant shifts occurring in the *composition* of California's population. These have important social and economic implications. Changes in age distribution, ethnicity, income levels, and other demographic trends have certain impacts; understanding these impacts is key to policy and budget planning for the future.

For example, California's relatively high rate of natural increase (the difference between births and deaths) has resulted in a rapid increase in the number of school-age children. This under-18 age group, along with the over-64 age group, depends on the working-

age population (18 to 64) for support. The higher this "dependency ratio," the greater the burden on the working-age population. In California, high birth rates and increasing life expectancies have led to increases in the dependency ratio, while immigration has lowered it (immigrants are concentrated in young working ages).

During the 1990s, dependency ratios in California have risen substantially due to increases in the number of children. Since the State is the primary provider of services to children, it is this part of the ratio that is of most concern to state policy makers.

It is projected that the number of births will remain at about the current level of just over 500,000 per year to the year 2000, with the total fertility rate remaining around 2.3 children per woman. The number of births could begin to increase after that point, however, as larger cohorts enter the prime child-bearing years.

The state's ethnic profile continues to undergo change. As recently as 1970, almost 80% of the state's residents were non-Hispanic White. By 1990, this figure had dropped to 57%,

with Hispanics comprising 26% of the state's residents, Asians 9%, and African Americans 7%. By 2000, the U.S. Census Bureau projects that no race/ethnic group will constitute a majority of California's population, and that by 2015 Hispanics will represent the single largest ethnic group in the state.

Throughout the 1990s, California has experienced record domestic migration flows out of the state: Between 1990 and 1996, on a net basis, more than one million people left California to live in other states. International migration to the state remains at high levels.

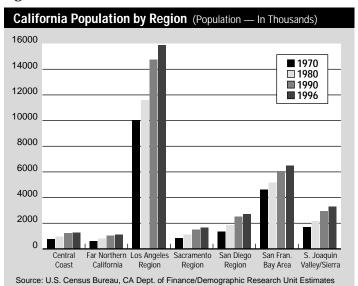
The following regional profiles describe where growth and change are occurring within the state. Figure 1 depicts this growth from 1970 to 1996.

Los Angeles Region

The Los Angeles region is home to almost half the state's residents. With more than 15 million people, metropolitan Los Angeles is the second-most populous metropolitan area in the nation and the seventh-largest urban agglomeration in the world. Despite slower growth in the 1990s, the region added over one million new residents between 1990 and

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Figure 1



"The Los Angeles region is home to almost half the state's residents...
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1996. During the 1990s, immigration gains almost offset domestic migration losses, while natural increase averaged more than 200,000 per year.

The area's intra-regional growth varies greatly. For about the past 25 years, average annual growth rates in Orange and Ventura counties have been twice that of Los Angeles County; San Bernardino and Riverside counties' rates have been three and four times greater, respectively. Los Angeles and Orange counties' population grew because natural increase and immigration more than offset domestic migration out of those counties. San Bernardino and Riverside counties' population gains are primarily attributable to natural increase and domestic migration, much of it from Los Angeles and Orange counties.

The age structure in this region is similar to the rest of the state. However, educational attainment levels are lower: 27% of adults age 25 and over have not completed high school, compared to 21% statewide (Figure 2). Per capita income also is lower, by 7%, than the rest of the state.

The population of the Los Angeles region is the most diverse in California. No single race/ethnic group constitutes a majority of its population. Hispanics comprise a larger share of the region's population (36%) than in any other region of the state. Figure 3 presents ethnic distribution by region.

San Francisco Bay Area

The fifth largest metropolitan area in the nation, the ninecounty San Francisco Bay Area is home to 6.5 million people. Two of the nation's 13 largest cities are in the Bay Area (San Jose ranked 11th and San Francisco ranked 13th). Residents of the Bay Area are the most educated and enjoy the highest incomes of any California region: per capita income is more than 30% higher, and about one of every three Bay Area adults is a college graduate (compared to roughly one in five for the rest of the state). Dependency ratios are lower in the Bay Area because of the region's lower proportion of children. There is a greater concentration of Asian residents in the Bay Area and a lower concentration of Hispanic residents.

Despite its relative wealth and low unemployment (or perhaps indirectly because of its wealth), the Bay Area has long been one of the slowest-growing regions of the state. That is not to say the Bay Area has not experienced dramatic population growth, only that the growth has been less rapid than the state as a whole. The fastest-growing counties in the Bay Area are Santa Clara, Sonoma, Contra Costa, and Solano. These mostly suburban counties are growing faster than the state average.

Like Los Angeles, the Bay Area tends to be a receiving area for international migrants and a sending area for migrants to the rest of California and the West. It is estimated that during the 1990s, the Bay Area gained almost 300,000 persons through immigration and more than that number through natural increase.

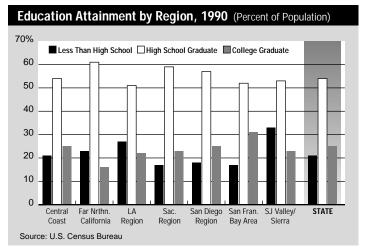
San Diego

San Diego is one of the fastest-growing regions of California. Since 1950, the population of the county has increased almost fivefold. During the 1990s, however, growth slowed considerably. Between 1990 and 1996, the county grew at a slower rate (1.2% per year) than the rest of California (1.3% per year).

Despite its location next to the border, San Diego is home to almost three times as many interstate migrants as international migrants. In 1990, only 15% of the county's population was foreign born, compared to 20% in the rest of the state. Reflecting these sources of growth, San Diego has a slightly higher concentration of Whites and lower concentrations of Hispanics and Asians.

San Diego's population is similar to the rest of the state in terms of age structure and per capita income, although its adults age 25 and over have slightly higher educational attainment levels.

Figure 2



Sacramento Region

The Sacramento metropolitan area population has almost doubled, to 1.6 million, since 1970. Much of its growth has been from domestic migration, as residents arrived from other states and other parts of California. The suburban and exurban areas have experienced the fastest growth, with the Sierra foothill portions of El Dorado and Placer counties consistently among the fastestgrowing locales in the state. Still, the vast majority of this region's population (70%) lives in Sacramento County.

Immigration has not been a large source of the region's growth. As a result, it has a higher concentration of Whites and a lower concentration of Hispanics than the rest of California. Age structure and per capita income is similar to the statewide profile, although the proportion of adults who have not completed high school is substantially lower (17% versus 24% for the state).

San Joaquin Valley/Sierra

Although its growth rate has slowed, the San Joaquin Valley has been the state's fastest-growing region during the 1990s. During this period, its population has grown 13%, reaching more than 3 million residents. Most of this growth has been due to high rates of natural increase, but the region also experienced substantial gains through immigration and moderate gains due to domestic migration. Hispanic and Asian populations have grown especially rapidly. By 1995, almost one-third of the region's population was Hispanic.

Per capita income in the region is almost 30% lower than in the rest of California, and educational attainment levels are much lower. One of every three adults in the San Joaquin Valley has not graduated from high school. The region has the highest dependency ratio in the state, fueled by a very high proportion of children. Unemployment rates are also high (over 10% in every county in the region). Two of the nation's three poorest large metropolitan areas — Fresno and Bakersfield — are located in the San Joaquin Valley.

Central Coast

The Central Coast is home to 1.3 million persons. Although it experienced rapid population growth during the 1980s, it has been the slowestgrowing region in the state in the 1990s. Between 1990 and 1996, its population increased less than 5%. Monterey County saw almost no change during the 1990s. The lack of growth in Monterey County can be partially, if not wholly, attributed to the closure of Fort Ord. However, even in Santa Barbara and San Luis Obispo counties, employment and population growth have been weak. Flows out of the region appear to have bottomed out between July 1993 and July 1994, when the region actually lost population.

Educational attainment levels and per capita income are slightly higher in this region than in the rest of California. Its ethnic profile shows slightly higher concentrations of Whites and lower concentrations of Asians and Pacific Islanders and African Americans.

Far Northern California

With just over 1 million residents, the 18 counties of far northern California comprise the least densely populated region of the state. Since 1980, the region has grown slightly slower than the state. Its inland valley counties generally have grown faster than its mountain and coastal counties, although Del Norte and Lassen counties have experienced relatively high growth rates due to new prisons and prison expansion.

Most of the region's growth is due to natural increase and domestic migration. The region has a slightly older population than the rest of the state because it tends to attract older domestic migrants. The proportion of college graduates is much lower than elsewhere in California, and per capita income is more than 20% lower. The region, which receives relatively few immigrants, has a very different ethnic composition than the rest of California: more than 80% of its population is comprised of non-Hispanic Whites.

Figure 3

Region	White	Hispanic	Asian/ Pacific Islander	African American	Native America
State	53.6	28.4	10.4	7.0	0.6
Central Coast	63.4	28.1	4.8	3.1	0.6
Far Northern	83.8	9.2	3.0	1.4	2.7
Los Angeles Region	45.4	36.4	9.9	7.8	0.4
Sacramento Region	71.1	12.4	8.4	7.0	1.0
San Diego Region	62.4	22.7	8.1	6.2	0.6
San Francisco Bay Area	56.8	16.9	17.1	8.6	0.5
San Joaquin Valley/Sierra	56.8	31.0	7.0	4.2	1.0

Population Forecasts From California's Three Largest Regions

Los Angeles

The regional population, currently about 16 million, is expected to reach 22.4 million in 2020. This represents a compound annual growth of 1.4%, compared to 2.4% in the decade of 1980. More than four-fifths of this growth will be due to natural increase. Changes in ethnic composition of the population observed in the past decade will probably continue in the future. The proportional share of the Hispanic and Non-Hispanic Asian population will increase while the proportion of non-Hispanic White and Black will decline.

Because more than 80% of the growth over the next quarter century will be due to children born since 1990, and because the region will remain attractive to immigrants who typically are young, the median age in the region will remain lower than the state and national averages. Compared to 1990, the labor force in 2020 will have to support a greater proportion of the population. The dependency ratio will increase from 0.48 in 1990 to 0.58 in 2020.

— Vivian Doche-Boulos, chief demographer, Southern California Association of Governments ("Draft Baseline Projection," June 1997)

San Francisco Bay Area

Between 1995 and 2020, the Bay Area will grow from a population of 6.4 million to 7.8 million, a 22% growth rate. The rest of California is expected to grow by almost 50% during this period. The region's slower growth can be attributed to two principal factors: The birth rate will decrease as a result of the aging of the population and migration into the region will slow as a result of a cooling economy.

Although its rate of growth is slower, the demographic changes will be more dramatic. By 2020, the majority of the region's population will be people of color, in comparison to 40% of the state's populace. The region's population is also likely to be "grayer" than the rest of California, due in part to the region's longer average life expectancy. Its "life expectancy at birth" was 81.4 years in 1995, six months longer than California's and 2.3 years longer than the nation's.

Between 2000 and 2020, the over-60 age group is expected to nearly double, growing by more than one million people. The most startling increase is in the over-85 age bracket. This group will increase from 91,000 in 1995 to more than 223,000 in 2020, a 143% increase. It is likely that the Bay Area will lead a trend toward work force participation beyond age 65. An economy that emphasizes information technology and service jobs also provides more opportunities for older workers to continue working later in life. Many older workers are likely to seize that opportunity since the Bay Area's high cost of living makes it harder to save and undermines the spending power of retirement benefits. And, as increasing numbers of jobs require highly skilled workers, employers are more

likely to take advantage of the intellectual capital older workers offer. As a result, the proportion of Bay Area employees over 65 will increase from about 14% in 1995 to more than 25% in 2020.

—Paul Fassinger & Laura Stuchinsky, Association of Bay Area Governments

San Diego

The region's population will reach 3.83 million in 2020, a gain of 1.15 million, or 43%. This represents an average annual increase of 46,000 persons per year, about 16,000 persons more per year than the growth so far in this decade. Almost two-thirds of the population change will come from natural increase (births minus deaths), with the rest due to people moving into the region. Hispanics and Asian and Other groups will grow the fastest between now and 2020, both more than doubling their population size. By 2020, no individual ethnic group will constitute a majority of the region's population.

The age cohort 65 and over will grow the fastest by 2020; the 18-34 group will grow the slowest. The total labor force will increase by 49%, slightly ahead of the overall population growth rate of 43%. Real per capita income (in 1996 dollars) is projected to rise from \$22,700 to \$26,600 in 2020.

—Jeff Tayman, Senior Demographer, San Diego Association of Governments ("Preliminary 2020 Regionwide Forecast," July 1997)

"It is likely that the Bay Area will lead a trend toward work force participation beyond age 65. An economy that emphasizes information technology and service jobs also provides more opportunities for older workers to continue working later in life... As a result, the proportion of Bay Area employees over 65 will increase from about 14% in 1995 to more than 25% in 2020."

Beyond California's "Golden Age"

The Retirement of the Baby Boomers

What will be the impact when California's baby boom generation, currently ages 34 to 51, begin to retire? How will the State replace the tax revenues from these "boomers" when most of their income no longer falls in the earned-income category? Where will the revenues come from to finance the education of the next wave of school-age children?

As California experiences major shifts in its population, these and other questions will need to be addressed. The State's current tax structure. which generates more revenues from the personal income tax than any other source, may not provide the necessary balance in the future. Demographic changes over the next two decades will result in a population with very different age, education, income, and employment attributes. All of these factors need to be considered to determine the most appropriate tax structure. It must be fair to all taxpayers and provide sufficient revenues for such vital needs as education.

To gain a better understanding of the impact of California's demographics on tax revenues, the State Controller's Office analyzed data from the U.S. Census Bureau¹ that contains demographic as well as tax revenue information. The results of this analysis are presented in the following report. As the report makes clear, California's biggest challenge will be to provide sufficient resources for

K-12 and higher education for the age cohorts that trail the baby boomers.

The "Golden Age"

For the next 8 to 12 years, California will be in a Golden Age with respect to tax revenues, thanks to the baby boom generation. The first half of the baby boomers, one-third of whom are college educated, currently are in their prime earning years. Over the next few years, however, the best educated, highest income group in history will pass through its peak earning and taxpaying years.

As significant numbers of baby boomers begin to retire, California's revenue growth from personal income taxes (PIT) will begin to sag. Many of the wealthiest of this group will retire early. Once retired, this age cohort will have little or no earned income. This does not mean they will be poor; rather, most of their income will come from savings and non-taxable or low-tax sources such as Social Security, pensions, and investments.

Figure 1 helps to illustrate the trend. This data shows that individuals in the 45-54 age group, the peak income years, make higher average PIT payments than any other age group. The next highest-paying group consists of those aged 35-44. By 2000, the entire baby boom generation will be in the two groups that pay the highest taxes. This will tend to swell tax coffers. By 2012, the peak of the baby boom will have passed through the peak earning years. The demographic Golden Age will be over. Since the best educated of the baby boomers is the "As the report makes clear, California's biggest challenge will be to provide sufficient resources for K-12 and higher education for the age cohorts that trail the baby boomers."

Figure 1
California Age Groups and Personal Income Taxes Paid

Age Group	% of CA Population*	% of CA PIT	Average Tax Paid
25-34	27.5	22.0	\$982
35-44	28.9	33.8	\$1,667
45-54	19.6	25.7	\$1,869
55-64	11.7	12.3	\$1,493
65+	12.3	6.2	\$723
Total/Average	100.0	100.0	\$1,382

^{*} Age 25 and Over

Source: State Controller's Office, based on data from U.S. Census Bureau's 1997 Current Population Survey

¹The U.S. Census Bureau recently added data elements to its Current Population Survey (CPS) that allow computation of state and federal tax payments. Data used in this report is from the 1997 CPS March Demographic Sample.

Figure 2

California College Graduates By Age Group

Age	% of CA Pop.*	% College Grads
25-34	27.5	26.7
35-44	28.9	27.8
45-54	19.6	33.4
55-64	11.7	30.6
65+	12.3	25.9

* Age 25 and Over

Source: State Controller's Office, based on data from U.S. Census Bureau's 1997 Current Population Survey

first half of the group, the impact of their retirement will start to be felt in about eight years.

Impact of Education

As depicted in Figure 2, the generation following the baby boomers is not only smaller, it is less educated. It has both a lower proportion of college graduates and a higher proportion of people who have not completed high school (Controller's Quarterly, March 1997). As Figure 3 further illustrates, educational achievement correlates with how much income tax a person pays. College graduates generate higher PIT revenues than persons without a college degree; PIT contributions drop as the level of educational achievement declines. Therefore, even when the postbaby boom work force hits its peak income years, their individual contributions to PIT revenues will not be as great.

The other significant trend concerns upcoming increases in the school-age population. Behind the relatively small group of Californians currently aged 18-24, there is a larger co-

hort that is the result of births that began to rise about 1980 and high levels of migration to California during the 1980s. This cohort already is swelling the K-12 education system. The next impact will be on California's higher education institutions. As this larger group moves into child-bearing years, it is expected that the number of births in California will climb. This will in turn spark new pressures on public services such as schools. In the near term, tax revenues will be forthcoming. In about 10 years, policy makers will face a dilemma: How will additional funds be generated to meet the increased demand for education at the same time that growth in personal income tax revenues is likely to decline?

Tax Revenue Sources

Currently, California receives more than half of its PIT revenues from individuals who represent less than 10% of the state's adult population. Figure 4 presents data compiled by the State Controller's Office on income taxes paid by individuals, based on their income group; this data includes both em-

ployed and unemployed Californians age 25 and older. As the chart illustrates, the largest segment of the population (those with adjusted gross incomes below \$25,000) contribute less than 6% of total PIT revenues.

In the near future, this reliance on the upper-income strata for revenues will work in the State's favor: The population aging into the highest-paying age group will increase, thus tending to increase personal income tax collections. To address the period beyond that, the present tax structure may be seen as counterproductive. Some experts believe that California's current progressive personal income tax system distorts economic activity by discouraging older workers from remaining in the labor force. An effort to raise PIT revenues by increases in marginal tax brackets could increase the incentive to retire, thus accelerating the retirement of baby boomers.

An alternative would be to shift to consumption taxes, such as the retail sales tax (RST). Shifting to a tax structure that relies more heavily on RST revenues will also have its

Figure 3

California Education Levels and Personal Income Taxes Paid

Education Level	% of CA Population*	% of CA PIT	Average Tax Paid
College Grad	28.7	56.5	\$2,809
Some College	28.9	26.0	\$1,282
High School Grad	24.6	11.5	\$670
Less Than High School	17.8	6.0	\$232
Total/Average	100.0	100.0	\$1,382

* Age 25 and Over

Source: State Controller's Office, based on data from U.S. Census Bureau's 1997 Current Population Survey

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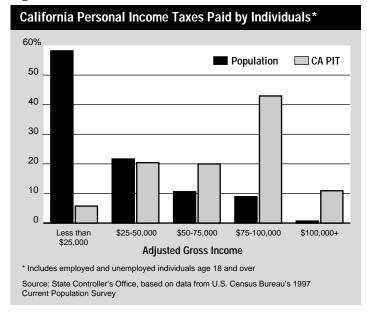
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Figure 4



problems. Research by the State Controller's Office has shown that per capita RST revenues have been declining in California (*Controller's Quarterly*, July 1996). This may be due to people spending a greater proportion of their income on services rather than on taxable commodities.

Employment Changes

The influence of demographics on future tax revenues needs to be considered in light of other anticipated changes in the economy, such as the industries where job growth will occur. The UCLA Anderson Forecast projects that over the next 10 years, jobs will grow most rapidly in services and trade, both of which pay lower than average wages. The slowest growth is projected for two industries that have higher than average compensation: durable manufacturing and govern-

Based on UCLA's forecasts of employment distribution for these industries in the year 2007, it appears that the total income tax yield to the State would be virtually the same as it is under the current industry structure. That is because the industry with the highest rate of growth, services, has a higher than average tax yield, despite its lower than average pay. If fact, the average annual tax paid by Californians working in services is almost as high (\$1,805) as the tax paid by workers in durable manufacturing (\$1,857), a higher-wage, but declining, industry.

One explanation for the high tax yield of services is the distribution of incomes. While the distribution of jobs in services is concentrated at the bottom of the income scale, it also has a larger proportion of highincome jobs than does durable manufacturing. For tax purposes, it is the high proportion of jobs that pay over \$100,000 that is crucial. It also is important to note that a higher proportion of jobs in the service industry are held by spouses than is the case in durable manufacturing. This is part of the reason why at the middleincome levels, the tax yield is higher for service jobs than for jobs in durable manufacturing. In services, 28% of the jobs are held by the second earner in a two-earner family. In durable manufacturing, second earners account for only 23% of the jobs.

The tax yield on a second income is higher than on the primary income. This is another reason why tax revenues have soared in the past: the increase in working wives. However, the increase in labor force participation rates by females is expected to slow over the next decade, thus causing a plateau in the tax yield from additional jobs.

Summary

The PIT is likely to continue to propel revenue surges for the State over at least the next eight years, as it has in the past two years, barring a slowdown in the economy. In the period that follows, however, this source of revenue growth will likely subside with the retirement of the baby boom generation. Decisions about how this revenue loss will be replaced need to be made soon, before the next wave of school-age children arrives. Increased education spending clearly will be necessary to ensure that the Golden Age is followed by a Golden Future.

"Currently, California receives more than half of its PIT revenues from individuals who represent less than 10% of the state's adult population."



California is undergoing epic demographic change. The massive generation of middleage baby boomers is approaching the beginning of retirement. Simultaneously, the children of these aging boomers (the "echo boomers") are about to spur another cycle of growth among younger adults. Overlaid on these effects are the cumulative impacts of foreign immigration, which will add further diversity as well as additional numbers to California's population in coming years. As we approach the new century, fully one-quarter of Californians are foreign born, and many more are the native-born children of immigrants. Directly and indirectly, immigration is changing the face of California's population.

By the year 2000, California will be home to 4.8 million more inhabitants than in 1990. By around 2010, California's population will have jumped another 6.2 million, to a total of 41 million. Twelve years from

today, service needs will have intensified and infrastructure requirements will be greater than ever.

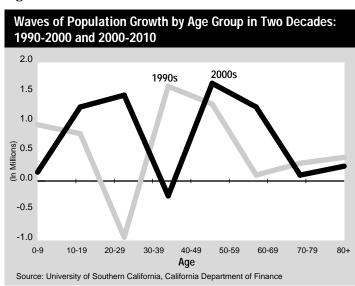
The major factor determining the type of service demand by the population is its age structure, not its ethnicity. The demands imposed by this anticipated growth will be more intense and costly at some ages than at others. Indeed, growth patterns in the new century's first decade will differ markedly by age from those in the current decade.

Age patterns of population growth in one decade are inevitably linked to growth in younger ages in the previous decade. Figure 1 displays the net increase (or decrease) in each age group between 1990 and 2000, and between 2000 and 2010. The large bulge of growth caused by the baby boomers is advancing through late middle age, with peak growth recorded in the 40s age group during the 1990s and in the 50s age group during the next decade (but with the front wall of the wave already rushing into the 60s). Marching 30 years behind is a new generation, the echo boomers, and in between lies a sharp dropoff in growth. These waves in the age structure of population growth will have large impacts on both public and private services.

Two age shifts underlie these impacts and will carry particular importance for planning for the next decade. First, the front edge of the large baby boom generation will advance into their 60s. The negligible change in that age range in the 1990s will be replaced with a powerful demographic surge of 1.2 million added people, with even more to follow thereafter. This surge has implications for health care needs and elderly services for a dependent population. Elders face growing risks of ill health - cancer, heart disease, arthritis, and other chronic diseases — and growing problems of physical disability. These health problems associated with aging will result in huge increases in claims on the Medicare trust fund, a federal responsibility.

A second dramatic change, where the impact will be addressed primarily at the state and local level, centers on

Figure 1



growth. These waves in the age structure of population growth will have large impacts on both public and private services."

"Marching 30 years

behind [the baby

boomers] is a new

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young adults in their 20s. Whereas a loss of 0.9 million individuals was recorded for this age group in the 1990s, growth will soar in the next decade by 1.5 million. This reversal from decline to growth in the numbers entering adulthood poses widespread effects, potentially jolting the apartment and job markets, as well as raising demand for prenatal and maternity care, transportation services, and more.

Education consumes the majority of California's budget about 40 cents of every dollar goes to K-12 public education and another 12 cents goes to higher education. Department of Finance projections for the period 1996-2006 foresee 13% growth in K-12 enrollment and 29% growth in post-secondary public enrollment. The driving demographic force here will be the surging number of Californians in their early 20s (rather than their rising college attendance rate). These impending realities highlight two major policy issues for the State: the underfunding of California's future education needs and the underparticipation of Californians in higher education.

California's per-student expenditures fall \$1,000 below the national average and our pupilstudent ratio is the highest of all states. Broad agreement is being reached that this level of funding must be increased if California is to build a labor force that can compete in a high-skilled economy. The data shown in Figure 1 underscore this point: Will the coming surge of 1.5 million additional adults in their 20s be accommodated in well-paying, stable occupations, or will these added workers be competing for unskilled jobs (or be added to the

ranks of the unemployed)? Production of a stable middle-class of taxpayers is clearly in the public interest. Indeed, the well-being of the future baby boom retirees will depend greatly on the productivity of the new generation of workers and taxpayers.

Getting California's youth educated beyond just high school looms as an issue of strategic importance to the State's economic future. The policy challenge is to expand the capacity of California's higher education system to fit the impending demand and to enable more California high school graduates to invest in their (and the State's) future by acquiring at least two years of college training. The fiscal challenge is daunting, requiring a triple play: meeting the growing population needs, increasing participation rates in higher education, and increasing the per-student expenditures.

Ethnic differences are particularly important with regard to education. Latinos comprise an ever-larger share of the enrollment, growing from 29% of K-12 enrollment in 1986 to 40% in 1996. This is expected to rise to 50% by 2006. However, Latinos comprise a much lower share of graduating high school seniors, reaching only 39% of the total by 2006. In that year, they will exceed the number of white high school graduates for the first time, underscoring the growing importance of Latinos for the future of the California economy. The policy challenge here will be twofold: elevating the rate at which Latinos graduate from high school and enabling more of those who graduate to pursue post-secondary education. Advancing these two aims can benefit the California economy

and reduce the threat of greater inequality and growing social polarization that could occur if Latinos are allowed to lag behind.

Accommodating 6.2 million additional residents between 2000 and 2010 inevitably will impose substantial infrastructure demands. The surging number of young adults, in particular, is going to tax the state's infrastructure as never before. More people in their 20s means more drivers on the roads, placing increased demand on already congested freeways and with longer waits at traffic lights. As they form new households, adults in their 20s typically rent apartments in densely developed areas, but their older peers will be dispersing outward to single-family or townhome residences in outlying areas. All of this land development is going to require advance planning and careful coordination to enhance the quality of urban life and protect the environmental resources for which California is famous.

The growing ranks of immigrants magnify many of the policy issues already presented. Access to quality education is especially important for accelerating the economic integration of young immigrants and their children. Indeed, this is the key ingredient needed for the immigrant children to advance beyond their parents in the quest for the American Dream. A recent USC study found an ironic downside, however, to immigrant assimilation. When newly arrived, immigrants place relatively modest demands on their communities. Compared to native-born Californians, they live more densely crowded in small apartments and ride public transit to work. But after 10 years of adjustment to California life, their "...[T]he well-being of the future baby boom retirees will depend greatly on the productivity of the new generation of workers and taxpayers."

transit ridership falls by half and they begin to "drive like a Californian." Similarly, the newly settled residents move to larger homes, often purchased, and adopt lifestyles with ever greater consumption. Thus the full impacts of immigrants on infrastructure and other public services will begin to emerge

after some years of assimilation.

Demographic change holds many implications for public policy. In the end, it is the wellbeing of the residents that counts, and closer demographic analysis can help us discover the different needs and urban behaviors of specific population groups. Demographic analysis also helps to tie together the fates of different generations, not only linking parents and children, but also linking the futures of retirees and young taxpayers, even if they come from different families and different ethnic groups.

Prison Populations

by Allan F. Abrahamse, RAND

The connection between demographic changes and prison population is complex, but a few simple calculations should be enough at least to make this point plausible, if not prove it.

In 1980, California had about 28,000 adults in its prisons. In 1996, there were roughly 146,000. During this 16-year period, the prison population grew at a rate of about 7.2% per year. During the same period, the population at risk of prison (persons aged 18 through 69) rose from about 16 million to about 22 million, an annual growth rate of only 1.5%. Clearly, the rise in California's prison population was not driven exclusively by increasing numbers of people.

To get to prison, one has to commit a crime, and changes in the demographic *composition* could affect prison populations even if the *number* of people changes hardly at all. We know, for example, that younger people commit more serious crimes than older people, so an increase in the relative number of young people could increase the number of prisoners. But in 1980, California saw about 1,330 violent crimes² per adult; since 1992, the rate has been falling. In 1996, it stood at about the same level seen in 1980. Over the 16-year period from 1980 to 1996, the violent crime rate has increased by only about 1.2% per year. So even demographic composition changes seem to have had a weak effect on the rise in the prison population.

The rise in California's prison population since 1980 has been largely driven by policy changes — specifically, changes in the way the criminal justice system treated persons convicted of a crime. In 1980, for example, only about 7% of all arrests for an index crime³ led to a prison sentence. In 1996, about 20% of all such arrests resulted in a prison sentence. Second, prison sentences have gotten longer — the average length of stay has gone from about two years to about three years.⁴ Taken together, these two trends account for almost all of the rise in California's prison population over the last 16 years.

The California Department of Corrections projects that the state will have over 200,000 prisoners in the year 2000, which is 50,000 more than today. Most of the increase will be due to an increased likelihood of going to prison if convicted, and longer sentences. Demographic changes will play only a small role.

¹ All numbers are taken from issues of *Crime and Delinquency in California*, published annually by the California Department of Justice.

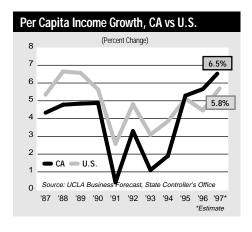
² Violent crimes are homicide, forcible rape, robbery, and aggravated assault. All are felonies that upon conviction would lead to a prison sentence.

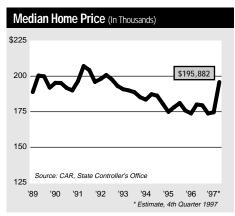
³ Index crimes are violent crimes, plus burglary, auto theft, and larceny.

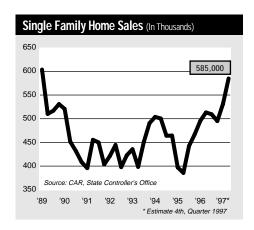
⁴ This is the average length of stay of persons released from prison, calculated in a very indirect way. The length of stay of persons currently being sent to prison is probably much longer.

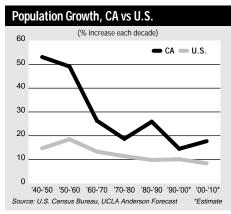
Facts and Figures

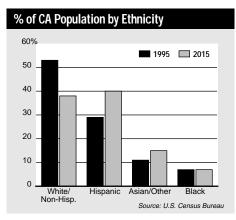
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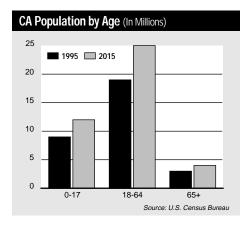


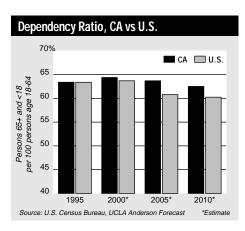


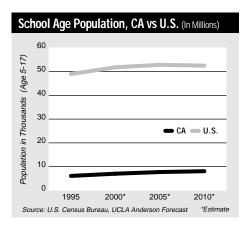


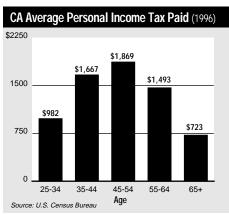












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